

A NEW SPECIES OF CAREX (CYPERACEAE: CARICOIDEAE) FROM SOUTH-EASTERN AUSTRALIA

by

K. R. THIELE*

ABSTRACT

Thiele, K. R. A new species of *Carex* (Cyperaceae: Caricoideae) from south-eastern Australia. *Muelleria* 6(3): 201-204 (1986). — A new species of *Carex*, *C. incomitata*, from montane south-eastern Australia is described and illustrated, with notes on its distribution and habitat.

INTRODUCTION

Examination of material determined as *Carex appressa* R.Br. in MEL and CBG has revealed that a number of specimens from Victoria and south-eastern New South Wales previously referred to that name constitute an undescribed species which is here named *C. incomitata*.

TAXONOMY

Carex incomitata K. R. Thiele, sp. nov.

C. appressa R.Br. forma *minor* sens. plur. auct. Aust., non Kükenthal.

Caricis appressae affinis sed rhizomate repenti, habitu diffuse caespitoso; inflorescentia brevi congesta, spiculis ad basim multorum flosculorum femineorum, ad maturitatem utriculorum late reflexorum, masculae sectionis terminalis inconspicuae, utriculis omnino tenuiter papyraceis, ambo extremitates versus aequaliter contractis, laete viridibus, ad maturitatem denigrantibus differt.

TYPE COLLECTION:

Victoria, Goongerah, 69 km N. of Orbost on the Bonang Highway, 37°21'S., 148°41'E., 8.xi.1982, K. R. Thiele 392 (HOLOTYPE: MEL 105860. ISOTYPES: CANB, K, NSW).

Perennial. Rhizome stout, short-creeping, 2-4 mm diameter, covered with persistent dull brown papery scales. Leaves to 85 cm x 8 mm, pale verdant green, rather thin and lax, strongly but finely retrorsely scabridulous at least distally on the margins and adaxial surface of the major nerves; internerve surfaces and minor nerves smooth to minutely tuberculate; leaf-sheath pale, transversely septate, smooth and glossy adaxially, smooth to minutely tuberculate abaxially, with a hyaline membranous margin. Culms erect to inclined, (26-)50-70(-90) cm tall, rather slender, acutely triquetrous with retrorsely scabridulous angles at least towards the apex. Inflorescence axis unbranched or with few closely appressed basal branches to 20 mm long, the axis and branches densely covered with numerous, congested, sessile, short, ovoid spikes, the whole forming a cylindrical or narrow-oblong spike-like panicle (2.4-)5-8(-10) cm long x (5-)6-8(-10) cm wide, sometimes somewhat lobed or interrupted at the base. Bracts subtending the panicle branches and spikes glumaceous or the lowermost filiform-scabrid, to 10 mm long. Spikes androgynous; axis 1.0-1.5 mm long, bearing 5-12 female florets below and 6-10 male florets above. Male glumes 2 mm long, ovate, obtuse or truncate-erose at the apex, with a pallid greenish one-nerved costa and hyaline margins suffused apically with reddish-chestnut. Female glumes 2.5 mm long, two thirds the length of the mature utricle, similar in shape and colouration to the male. Utricle (2.4-)2.5-2.6(-2.7) mm long, (1.4-)1.5-1.6(-1.8) mm wide, plano-convex to lenticular in section, elliptic,

* C/o Australian National Herbarium, CSIRO Division of Plant Industry, Black Mountain, Canberra, A.C.T., Australia 2601.

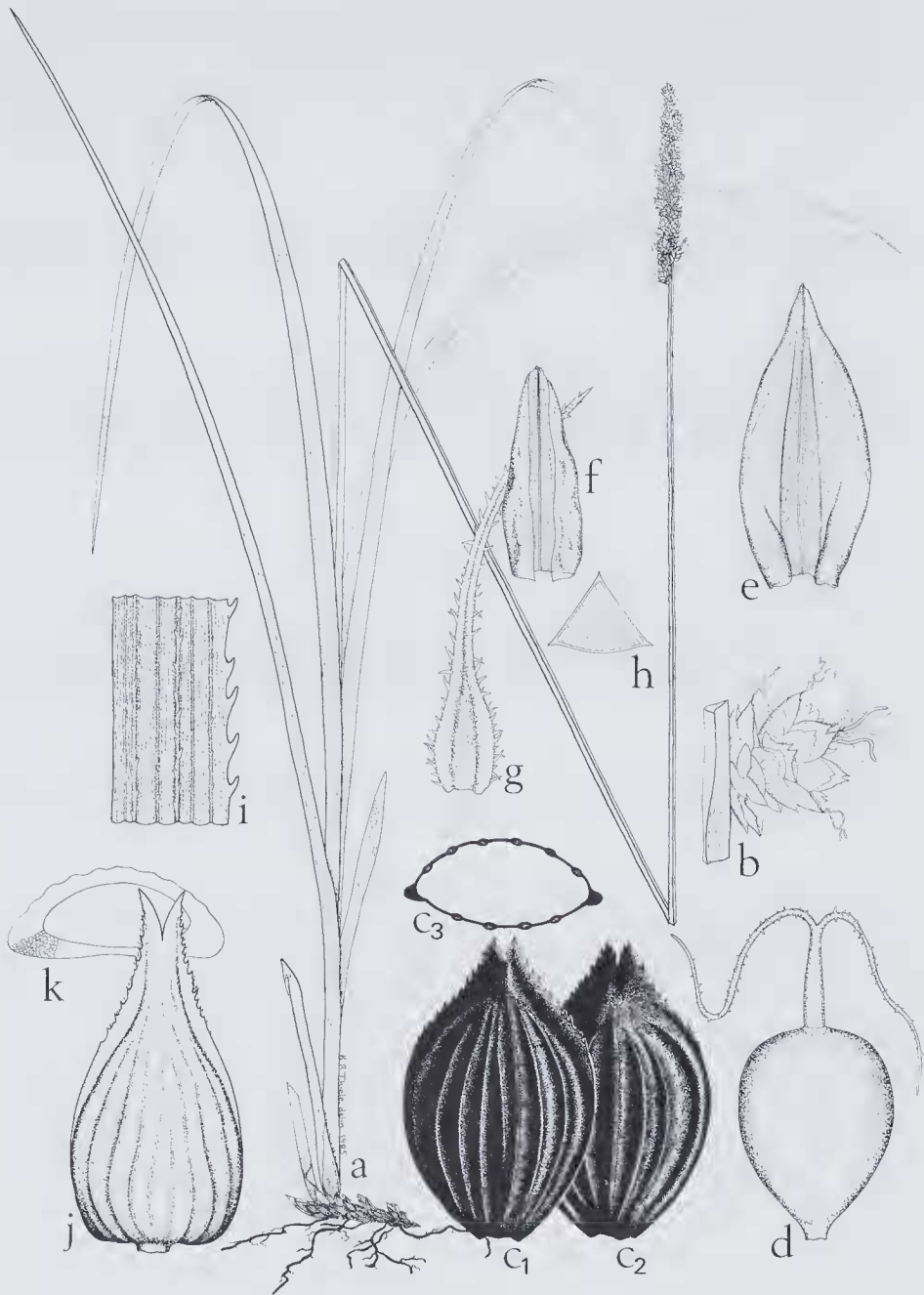


Fig. 1. *Carex incomitatus*. a — habit, x 0.5. b — spikelet, x 3. c — utricle (1, abaxial; 2, adaxial; 3, T.S.), x 15. d — nut, x 15. e — female glume, x 18. f — male glume, x 18. g — lower bract, x 14. h — T.S. culm, x 7. i — leaf, portion of abaxial surface, x 14. *Carex appressa*. j — utricle, abaxial, x 15. k — T.S. utricle, x 15. a—i, from the holotype.

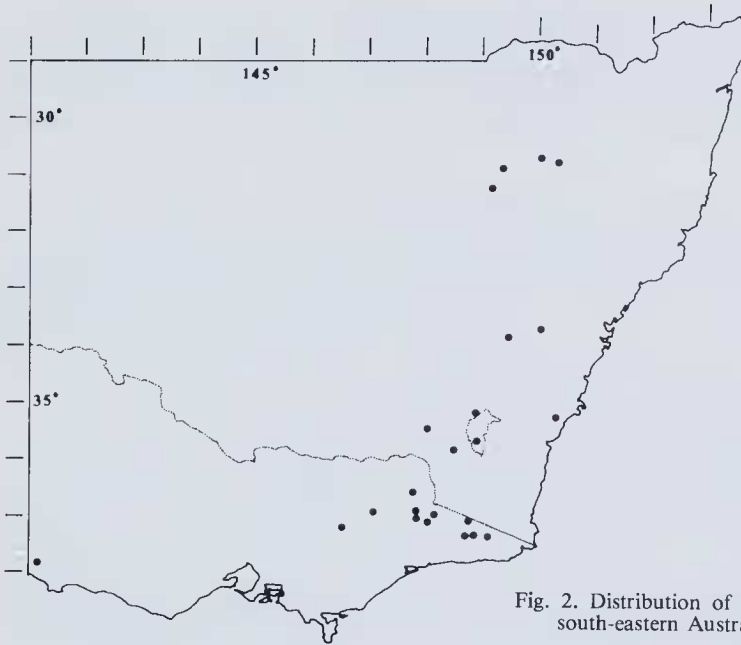


Fig. 2. Distribution of *Carex inomitata* in south-eastern Australia.

narrowing evenly and symmetrically to both ends, short-beaked, spiny-scabrous in the upper third, papery throughout but slightly ribbed on the margins, vivid green becoming shining black at maturity; abaxial surface 6-7 nerved; adaxial surface 4-5 nerved but the nerves sometimes incomplete. *Style-branches* 2. *Achene* obovate, short-beaked, lenticular in transverse section.

DISTRIBUTION:

Apparently widespread and frequent in montane eastern Victoria and south-eastern New South Wales, with isolated occurrences as far north as the Warrumbungle Range. A single record for the Western District of Victoria (MEL 536393) is anomalous and further collecting is needed to evaluate the significance of this record.

HABITAT:

Characteristically in open grassy woodland and forests, usually on well-drained slopes and ridge-tops. In this respect it differs from other species of *Carex* in the region.

SELECTED SPECIMENS EXAMINED:

Victoria — East Gippsland, B.A.Road, between Bonang Highway and Mount Ellery, Grid Z20, 25.xi.1970, A.C. Beauglehole 3493 (MEL 536389). Weeragua, Grid Z23, 20.xi.1947, N.A. Wakefield 3081 (MEL 1508969). Near head of Bundarra River at fossil cliff, Bogong High Plains, c. 5600 feet, 15.i.1946, J.H. Willis (MEL 1527685). Wilkin, SW. of Casterton, Grid D38, 30.x.1960, A.C. Beauglehole 8225 (MEL 536393).

New South Wales — Cave Creek, 18 miles NNE. of Kiandra, 11.xii.1969, R. Coveny 2606 & A. Rodd (MEL 1527686). Batlow Hill, 0.5 km W., 3.5 km N. of Batlow P.O., 14.xii.1980, K.R. Thiele 188 (CBG 8100631). Little Forest Plateau, 16 km NW. of Milton, South Coast, 35°12'S., 150°19'E., alt. 500 m, 11.xii.1975, I.R. Telford 4221 (CBG 8202264).

Australian Capital Territory — Gudgenby Nature Reserve, Orroral River crossing on Orroral Road, at picnic reserve, 35°40'S., 148°59'E., alt. 880 m, 23.x.1980, E.M. Canning 5020 & D. Verdon (CBG 8007982).

NOTES:

The epithet is derived from the Latin for "unaccompanied". *C. incomitata* is characteristically found in a habitat from which other species of *Carex* are absent.

C. incomitata belongs in *Carex* subgenus *Vignea*, along with *C. appressa* with which it has been confused. It differs from that species principally in the characters given in Table 1.

Table 1. Principal characters distinguishing *Carex appressa* and *C. incomitata*

	<i>C. appressa</i>	<i>C. incomitata</i>
Utricle	inflated and corky in the lower half, abruptly contracting to the insertion, dull brown at maturity.	membranous and papery throughout, evenly and symmetrically tapering to both ends, bright green turning black at maturity.
Spikelets	basal female florets usually few, inconspicuous, the terete distal male section clearly projecting at maturity.	basal female florets many, widely reflexed at maturity and hiding the distal male section from view.
Inflorescence	often more than 12 cm long, sometimes rather loose.	never more than 12 cm long, always congested.
Habit	often large, dense, well-formed tussocks.	rather diffuse, shortly-rhizomatous tussocks.
Habitat	moist places in swamps, soaks and stream-banks.	hill slopes and ridge-tops in grassy forest and woodland.

Specimens of *Carex incomitata* have usually been referred to *C. appressa* R.Br. forma *minor* Kükenthal. Examination of apparent type material (MEL 625287) of this latter taxon held at MEL reveals it to be clearly similar to typical *C. appressa* in the possession of inflated, corky utricles. *C. incomitata*, with papery utricles, differs markedly.

Although *Carex incomitata* generally resembles *C. appressa* it may not be taxonomically close to that species. Until a comprehensive systematic treatment of at least the Australian species of *Carex* is prepared the affinities of this new species remain in doubt.

ACKNOWLEDGEMENTS

I wish to thank Dr J. H. Ross, National Herbarium of Victoria, Melbourne, and Dr B. A. Barlow, Australian National Herbarium, CSIRO, Canberra, for their comments on the manuscript. Dr A. Kanis, Australian National Herbarium, prepared the Latin diagnosis.